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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/827,043	04/19/2004	Joshua M. Cobb	86994ANAB	2381

7590 08/24/2004

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EXAMINER	
SEVER, ANDREW T	

ART UNIT	PAPER NUMBER
2851	

DATE MAILED: 08/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/827,043	COBB ET AL.	
	Examiner	Art Unit	
	Andrew T Sever	2851	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-6 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-6 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 19 April 2004 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 4/19/2004.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

2. Claims 1 and 2 provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 87 and 88 respectively of copending Application No. 10/662,208. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Claims 87 and 88 of the copending application are identical to claims 1 and 2 of the present application.

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 3 and 4 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 88 of copending Application No. 10/662,208 in view of claims 45 and 46 of US 6,755,532 which is commonly owned and has a common inventor with the present application.

Claims 3 and 4 are dependent on claim 2 and therefore claim the subject mater of claim 88 of copending application 10/662,208. They further claim a focusing optical element adjacent to the image source which in the case of the present application's claim 4 comprises of a Fresnel lens, holographic optical element, and a diffraction element, and a lens. Claims 45 and 46 of the '532 patent provide a teaching of providing this component for directing the light towards the center of a curved mirror. Since as is well known in the art the addition of the lens allows for the light to be better focused on the surface it is being projected towards (in this case the center of a curved mirror), it would be obvious to add the lens taught/claimed by the copending '532 patent to the autostereoscopic apparatus of the copending claim 88 of the '208 application.

This is a provisional obviousness-type double patenting rejection.

5. Claims 3-6 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 88 of copending Application No. 10/662,208 in view of US 6,416,181. (Although the '181 patent has common inventors, it also qualifies as prior art under 35 USC 102b.)

Claims 3-6 are dependent on claims 1 and 2 and therefore claim the subject mater of claims 87 and 88 of copending application 10/662,208. They further claim a focusing optical element adjacent to the image source, which in the case of the present application's claim 4 comprises of a Fresnel lens, holographic optical element, and a diffraction element, and a lens. The '181 patent teaches in figure 2 an autostereoscopic system which includes an image source (74) a relay lens assembly (54) which includes lenses (as claimed in applicant's claim 4). The relay lenses are taught to be important for distortion-free imaging in column 13 lines 47 and 48. Since it is desirable to have a distortion free image in an autostereoscopic, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use lenses as taught by the '181 patent in order to insure distortion-free imaging.

With regards to applicant's claim 5:

The '181 patent further teaches in column 8 lines 66 that the diameter of the viewing pupil is in excess of 20 mm which is within the range of applicant's claim 5. It teaches above in lines 55-65 that this is chosen to make the viewing experience comfortable for the viewer. Accordingly it would be obvious to one of ordinary skill in

the art at the time the invention was made to use this diameter in the autostereoscopic apparatus of claim 87 of the '208 application.

With regards to applicant's claim 6:

The '181 patent teaches in column 9 lines 53-67 that the preferred interocular distance is 55-75 mm in order to achieve wide field of view. Since it is desirable to have a wide field of view in autostereoscopic systems it would have been obvious to one of ordinary skill in the art to use such a interocular distance in apparatus of claim 87 of the '208 application.

This is a provisional obviousness-type double patenting rejection.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US 5,483,307 to Anderson, see figures 1 and 2

US 5,754,344 to Fujiyama, see figures 1A and 1B.

US 6,014,164 to Woodgate et al. which teaches in figure 23 a autostereoscopic system comprising of a left and right imaging system and a beam splitter as well as two curved mirrors, however the modulators are after the beam splitters and therefore Woodgate does not project a left curved image towards the center of curvature of the curved mirrors, since the light is not image light until after the modulator.

The following four below teach ball lenses, a single curved mirror and at least one beamsplitter:

US 6,768,585 to Agostinelli et al.

US 6,702,442 to Agostinelli et al.

US 6,550,918 to Agostinelli et al.

US 6,511,182 to Agostinelli et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T Sever whose telephone number is 571-272-2128. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AS

JUDY NGUYEN
PRIMARY EXAMINER